

# Surface Mount Low Pass Filter

50Ω DC to 225 MHz

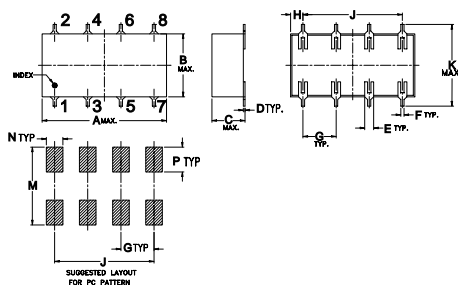
## Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input	0.5W max.

## Pin Connections

INPUT	1
OUTPUT	8
GROUND	2,3,4,5,6,7

## Outline Drawing



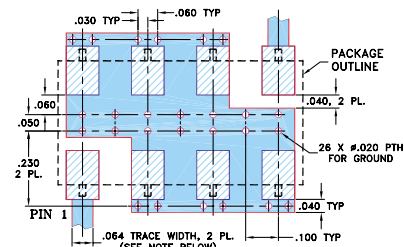
## Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
0.75	0.38	0.28	0.01	0.05	0.02	0.2
19.05	9.65	7.11	0.25	1.27	0.51	5.08

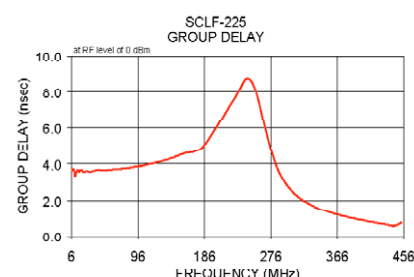
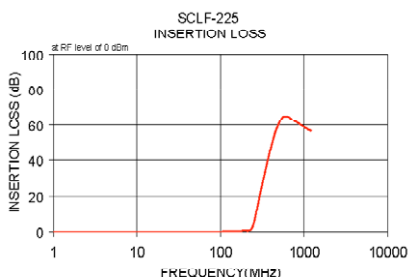
  

H	J	K	M	N	P	wt
0.07	0.6	0.45	0.47	0.1	0.15	grams
1.91	15.24	11.43	11.94	2.54	3.81	1.60

## Demo Board MCL P/N: TB-187 Suggested PCB Layout (PL-049)



- NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .030" ± .002"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.  
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.  
3. DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)  
4. DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK



# SCLF-225+ SCLF-225



CASE STYLE: YY161  
PRICE: \$11.45 ea. QTY (1-9)

+ RoHS compliant in accordance  
with EU Directive (2002/95/EC)

The +Suffix identifies RoHS Compliance. See our web site  
for RoHS Compliance methodologies and qualifications.

## Features

- wide selection of cut-off frequencies
- excellent rejection
- custom models available

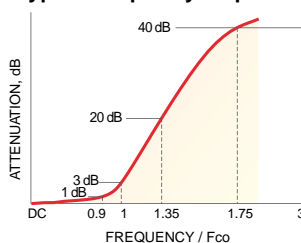
## Applications

- defense communications
- receivers/transmitters
- harmonic rejection of VCOs

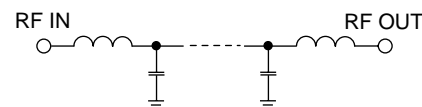
## Low Pass Filter Electrical Specifications

PASSBAND (MHz)	fco, (MHz) Nom.	STOPBAND (MHz)	VSWR (:1)
(loss < 1 dB)	(loss 3 dB)	(loss > 20 dB) (loss > 40 dB)	Pass band typ. Stop band typ.
DC-225	250	340-440 440-1200	1.7 18

## typical frequency response



## electrical schematic



## Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
$\bar{x}$	$\sigma$			
1.00	0.02	0.00	6.00	3.63
32.10	0.09	0.00	6.94	3.72
63.30	0.13	0.00	8.02	3.69
94.40	0.18	0.01	9.28	3.69
125.50	0.24	0.01	10.73	3.34
156.60	0.34	0.01	12.40	3.54
187.80	0.63	0.03	14.34	3.66
225.00	0.85	0.05	16.58	3.59
250.00	4.47	0.90	19.17	3.67
275.00	13.44	1.06	22.40	3.56
288.00	18.01	1.02	25.90	3.60
301.00	22.28	0.98	30.25	3.58
314.00	26.30	0.97	34.98	3.60
327.00	30.03	0.97	40.86	3.66
340.00	33.46	0.98	47.25	3.65
353.00	36.62	1.01	55.20	3.66
370.40	40.58	1.05	63.82	3.70
387.80	44.45	1.13	74.56	3.73
405.20	48.13	1.21	86.20	3.80
422.60	51.39	1.27	100.71	3.89
440.00	54.18	1.31	113.44	4.00
457.00	56.71	1.41	136.03	4.22
474.90	64.60	1.52	157.28	4.54
492.80	65.09	1.93	183.74	4.95
510.70	62.97	1.53	225.00	7.52
528.60	61.45	1.33	250.00	8.59

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